

Dr. Duke's Phytochemical and Ethnobotanical Databases

Chemicals found in *Achillea millefolium*

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
2	(-)-BETONICINE	Plant				Jeffery B. Harborne and H. Baxter, eds. 1983. Phytochemical Dictionary. A Handbook of Bioactive Compounds from Plants. Taylor & Frost, London. 791 pp.
0	(-)-VIBURNITOL	Plant				Jeffery B. Harborne and H. Baxter, eds. 1983. Phytochemical Dictionary. A Handbook of Bioactive Compounds from Plants. Taylor & Frost, London. 791 pp.
0	(E)-NEROLIDOL	Leaf				--
67	1,8-CINEOLE	Leaf	24.0	1680.0	-0.31413337784745815	--
0	2,3-DEHYDROXYDESACETOXY MATRICIN	Plant				Bisset, N.G., ed. 1994. Herbal Drugs and Phytopharmaceuticals. CRC Press. Boca Raton, FL. 566 pp.
0	2,3-DIHYDROACETOXYMATRICIN	Plant				--
0	2-PENTYL-5-PROPYLRESORCINOL	Plant		70.0		--
0	3-OXAGUAIANOLIDE	Plant				--
0	4-OXO-3,4-DIHYDRO-2,3-DIAZAPHENOXANTHIN	Plant		36.0		--
0	5-HYDROXY-3,6,7,4'-TETRAMETHOXYFLAVONE	Plant				J.S. Glasby Dict.Pls Containing 2ndary Metabolite. 1991.
0	6,10,14-TRIMETHYL-PENTADECAN-2-ONE	Plant		32.0		--
0	8-ACETOXYARTABSIN	Plant				--
0	8-ACETYLAGELOLIDE	Leaf				Bisset, N.G., ed. 1994. Herbal Drugs and Phytopharmaceuticals. CRC Press. Boca Raton, FL. 566 pp.
0	8-ANELOOXYARTABSIN	Plant				--
0	ACETYLBALCHANOLIDE	Plant				J.S. Glasby Dict.Pls Containing 2ndary Metabolite. 1991.

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	ACHICEINE	Plant				Williamson, E. M. and Evans, F. J., Potter's New Cyclopaedia of Botanical Drugs and Preparations, Revised Ed., Saffron Walden, the C. W. Daniel Co., Ltd., Essex UK, 362 pp, 1988, reprint 1989.
1	ACHILLEINE	Plant				--
0	ACHILLETINE	Plant				J.S. Glasby Dict.Pls Containing 2ndary Metabolite. 1991.
0	ACHILLICIN	Plant				Williamson, E. M. and Evans, F. J., Potter's New Cyclopaedia of Botanical Drugs and Preparations, Revised Ed., Saffron Walden, the C. W. Daniel Co., Ltd., Essex UK, 362 pp, 1988, reprint 1989.
2	ACHILLIN	Plant				--
1	ACONITIC-ACID	Plant				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
11	ADENINE	Plant				Tunon, H., Thorsell, W., and Bohlin, L. 1993. Mosquito Repelling Activity of Compounds Occurring in <i>Achillea millefolium</i> L. (Asteraceae). Economic Botany 48(2): 111-120, 1994.
1	ALLO-OCIMENE	Leaf	4.0	140.0	1.0	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
20	ALPHA-BISABOLOL	Leaf	1.0	915.0	1.264865272094972	--
3	ALPHA-CADINOL	Leaf	1.0	15.0	0.03356316627597684	--
0	ALPHA-COPAENE	Leaf				--
3	ALPHA-CURCUMENE	Leaf				--
2	ALPHA-HUMULENE	Leaf				--
0	ALPHA-MUROLENE	Leaf				--
0	ALPHA-PATCHOULENE	Plant		90.0		--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
4	ALPHA-PEROXYACHIFOLIDE	Plant				Bisset, N.G., ed. 1994. Herbal Drugs and Phytopharmaceuticals. CRC Press. Boca Raton, FL. 566 pp.
11	ALPHA-PHELLANDRENE	Leaf				--
28	ALPHA-PINENE	Leaf	1.0	1000.0	-0.15961997585151536	--
13	ALPHA-TERPINENE	Leaf	2.0	1120.0	0.2663807470003411	--
23	ALPHA-TERPINEOL	Leaf	1.0	80.0	-0.4498172854768475	--
0	ALPHA-THUJENE	Leaf				--
6	ALPHA-THUJONE	Leaf	3.0	240.0	-0.5168544216563907	--
6	ALPHA-THUJONE	Plant				--
5	ALUMINUM	Plant	6.0	34.0	-0.6894552686751528	--
2	ANACYCLIN	Root				Jeffery B. Harborne and H. Baxter, eds. 1983. Phytochemical Dictionary. A Handbook of Bioactive Compounds from Plants. Taylor & Frost, London. 791 pp.
101	APIGENIN	Plant				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
2	APIGENIN-7-O-GLUCOSIDE	Plant				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
0	APIGENIN-GLUCOSIDE	Plant				--
0	ARABINOSE	Plant				Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.
0	ARTEMISIA-ALCOHOL	Leaf	1.0	80.0		--
0	ARTEMISIA-KETONE	Leaf				--
0	ARTEMISIATRIENE	Leaf	1.0	65.0	-1.414213562373094	--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	ARTEMETIN	Plant				Williamson, E. M. and Evans, F. J., Potter's New Cyclopaedia of Botanical Drugs and Preparations, Revised Ed., Saffron Walden, the C. W. Daniel Co., Ltd., Essex UK, 362 pp, 1988, reprint 1989.
15	ASCARIDOLE	Leaf	120.0	6600.0	-0.3837260705884196	--
0	ASCARIDOLE-ISOMER	Leaf	5.0	335.0		--
112	ASCORBIC-ACID	Leaf	580.0	3100.0	-0.15627959906914124	List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
112	ASCORBIC-ACID	Plant	119.0	672.0	-0.4359276103428388	--
0	ASH	Plant	17700.0	100000.0	-0.3796129196407384	--
2	ASPARAGINE	Plant				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
0	AUSTRICIN	Plant				Wealth of India.
10	AZULENE	Leaf	0.0	8000.0		--
0	BALCHANOLIDE	Plant				Williamson, E. M. and Evans, F. J., Potter's New Cyclopaedia of Botanical Drugs and Preparations, Revised Ed., Saffron Walden, the C. W. Daniel Co., Ltd., Essex UK, 362 pp, 1988, reprint 1989.
0	BALCHANOLIDE-ACETATE	Plant				Bisset, N.G., ed. 1994. Herbal Drugs and Phytopharmaceuticals. CRC Press. Boca Raton, FL. 566 pp.
0	BENZALDEHYDECYANHYD RINGLYCOSIDE	Plant				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
53	BETA-CAROTENE	Plant				--
0	BETA-CARYOPHYLLENE	Leaf	1.0	65.0	-0.303004238741691	--
0	BETA-CARYOPHYLLENE-OXIDE	Leaf	1.0	30.0	-1.0	--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	BETA-CUBEBENE	Leaf	1.0	15.0	-0.27140166674948796	--
5	BETA-ELEMENE	Leaf				--
0	BETA-FARNESENE	Leaf				--
0	BETA-HIMACHALENE	Plant		50.0		--
13	BETA-PINENE	Leaf	1.0	720.0	0.6328642794210592	--
47	BETA-SITOSTEROL	Plant				Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.
0	BETA-SITOSTEROL-ACETATE	Plant				Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.
5	BETA-THUJONE	Leaf	1.0	30.0	-0.5791445507936085	--
14	BETAINE	Plant				Wealth of India.
2	BETONICINE	Plant				Wealth of India.
35	BORNEOL	Leaf	6.0	275.0	-0.1351054728581718	--
12	BORNYL-ACETATE	Plant		50.0	-0.43702890811674244	--
6	BUTYRIC-ACID	Plant				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
102	CAFFEIC-ACID	Plant				--
28	CALCIUM	Plant	1535.0	8670.0	-0.5262108144941796	--
9	CAMPHENENE	Leaf	2.0	600.0	0.03409920562522311	--
0	CAMPHERENONE	Plant		70.0		--
41	CAMPHOR	Leaf	20.0	2880.0	-0.18433975802654748	--
0	CAPRIC-ACID-METHYL-ESTER	Plant				Tunon, H., Thorsell, W., and Bohlin, L. 1993. Mosquito Repelling Activity of Compounds Occurring in <i>Achillea millefolium</i> L. (Asteraceae). Economic Botany 48(2): 111-120, 1994.

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
2	CAPRYLIC-ACID-METHYL-ESTER	Plant				Tunon, H., Thorsell, W., and Bohlin, L. 1993. Mosquito Repelling Activity of Compounds Occurring in <i>Achillea millefolium</i> L. (Asteraceae). Economic Botany 48(2): 111-120, 1994.
0	CARBOHYDRATES	Plant	133104.0	752000.0	0.5125462432567227	--
37	CARVACROL	Leaf				--
31	CARYOPHYLLENE	Leaf	4.0	160.0	-0.5782062507598946	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
6	CASTICIN	Plant				Williamson, E. M. and Evans, F. J., Potter's New Cyclopaedia of Botanical Drugs and Preparations, Revised Ed., Saffron Walden, the C. W. Daniel Co., Ltd., Essex UK, 362 pp, 1988, reprint 1989.
0	CEROTINIC-ACID	Plant				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
10	CHAMAZULENE	Plant	0.0	4845.0		--
0	CHAMAZULENE-CARBOXYLIC-ACID	Plant				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
77	CHLOROGENIC-ACID	Plant				Tunon, H., Thorsell, W., and Bohlin, L. 1993. Mosquito Repelling Activity of Compounds Occurring in <i>Achillea millefolium</i> L. (Asteraceae). Economic Botany 48(2): 111-120, 1994.
20	CHOLINE	Plant				Tunon, H., Thorsell, W., and Bohlin, L. 1993. Mosquito Repelling Activity of Compounds Occurring in <i>Achillea millefolium</i> L. (Asteraceae). Economic Botany 48(2): 111-120, 1994.
24	CHROMIUM	Plant	0.4	2.5	-0.6300345087929166	--
0	CHRSANTHENYL-ACETATE	Leaf				--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	CINEOLE	Plant				Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.
0	CIS-BETA-FARNESENE	Plant		110.0		--
0	CIS-CARVEOL	Plant		200.0	1.0	--
0	CIS-CHRSANTHENOL	Leaf	1.0	30.0		--
3	CIS-DEHYDROMATRICARIA-ESTER	Leaf				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
0	CIS-JASMONE	Leaf	2.0	125.0	1.7044539014540394	--
0	CIS-NEROLIDOL	Plant		230.0	1.0	--
0	CIS-SABINENE-HYDRATE	Leaf	1.0	80.0	-0.2862032724587523	--
0	CIS-SABINOL	Plant		100.0	1.0	--
2	COBALT	Plant	0.6	3.1	-0.37614265145342984	--
1	COPAENE	Leaf	1.5	60.0	1.1888404716143406	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
4	COSMOIIN	Plant				Wealth of India.
0	COUMARINS	Plant		3500.0	-1.0	Bisset, N.G., ed. 1994. Herbal Drugs and Phytopharmaceuticals. CRC Press. Boca Raton, FL. 566 pp.
10	CUMINALDEHYDE	Leaf	0.3	11.0	-0.8843635097531161	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
0	DEACETYLMATRICAIN	Leaf				--
0	DEACETYLMATRICARIN	Plant				--
0	DELTA-4-CARENE	Leaf				--
9	DELTA-CADINENE	Leaf	0.2	8.0	-0.4292576505663304	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	DESACETYLMATRICIN	Leaf				Bisset, N.G., ed. 1994. Herbal Drugs and Phytopharmaceuticals. CRC Press. Boca Raton, FL. 566 pp.
1	DEXTROSE	Plant				Newall, C. A., Anderson, L. A. and Phillipson, J. D. 1996. Herbal Medicine - A Guide for Health-care Professionals. The Pharmaceutical Press, London. 296pp.
0	DIHYDROPARTHENOLIDE	Leaf				Bisset, N.G., ed. 1994. Herbal Drugs and Phytopharmaceuticals. CRC Press. Boca Raton, FL. 566 pp.
2	DULCITOL	Plant				Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.
0	EO	Plant	177.0	14000.0	0.3238465858545322	--
0	EO	Leaf	250.0	16000.0	0.3927378316881657	--
0	EO	Flower	700.0	5000.0	-0.256861435811866	List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
13	EUCALYPTOL	Plant				Newall, C. A., Anderson, L. A. and Phillipson, J. D. 1996. Herbal Medicine - A Guide for Health-care Professionals. The Pharmaceutical Press, London. 296pp.
76	EUGENOL	Plant				Tunon, H., Thorsell, W., and Bohlin, L. 1993. Mosquito Repelling Activity of Compounds Occurring in <i>Achillea millefolium</i> L. (Asteraceae). Economic Botany 48(2): 111-120, 1994.
2	FARNESENE	Plant				--
0	FAT	Seed	223000.0	334000.0	0.3614060995374496	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
0	FAT	Plant	7080.0	40000.0	-0.1714507664609065	--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
61	FERULIC-ACID	Plant				Tunon, H., Thorsell, W., and Bohlin, L. 1993. Mosquito Repelling Activity of Compounds Occurring in <i>Achillea millefolium</i> L. (Asteraceae). Economic Botany 48(2): 111-120, 1994.
15	FIBER	Plant	69000.0	201000.0	-0.16122268403058113	--
0	FIBER(CRUIDE)	Plant		69000.0	-0.6486558303247424	--
0	FIBER(DIETARY)	Plant		412000.0	0.5188999674765548	--
15	FOLACIN	Plant				--
23	FOLIC-ACID	Leaf				Wealth of India.
13	FORMIC-ACID	Plant				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
6	FURFURAL	Plant				--
1	FURFURYL-ALCOHOL	Plant				--
1	GALACTOSE	Plant				Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.
62	GALLIC-ACID	Plant				Tunon, H., Thorsell, W., and Bohlin, L. 1993. Mosquito Repelling Activity of Compounds Occurring in <i>Achillea millefolium</i> L. (Asteraceae). Economic Botany 48(2): 111-120, 1994.
0	GAMMA-CADINENE	Leaf				--
11	GAMMA-TERPINENE	Leaf	9.0	370.0	0.34147926512769305	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
13	GERANIAL	Leaf	1.0	50.0	-0.3978078018016716	--
5	GERANYL-ACETATE	Plant		36.0	-0.5241410325713916	--
2	GERMACRENE-D	Leaf				--
7	GLUCOSE	Plant				Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
8	GLUTAMIC-ACID	Plant				Tunon, H., Thorsell, W., and Bohlin, L. 1993. Mosquito Repelling Activity of Compounds Occurring in <i>Achillea millefolium</i> L. (Asteraceae). Economic Botany 48(2): 111-120, 1994.
12	GLYCINE	Plant				Tunon, H., Thorsell, W., and Bohlin, L. 1993. Mosquito Repelling Activity of Compounds Occurring in <i>Achillea millefolium</i> L. (Asteraceae). Economic Botany 48(2): 111-120, 1994.
6	GUAIAZULENE	Plant				Williamson, E. M. and Evans, F. J., Potter's New Cyclopaedia of Botanical Drugs and Preparations, Revised Ed., Saffron Walden, the C. W. Daniel Co., Ltd., Essex UK, 362 pp, 1988, reprint 1989.
0	HEPTADECANE	Plant				--
7	HISTIDINE	Plant				Tunon, H., Thorsell, W., and Bohlin, L. 1993. Mosquito Repelling Activity of Compounds Occurring in <i>Achillea millefolium</i> L. (Asteraceae). Economic Botany 48(2): 111-120, 1994.
0	HOMOSTACHYDRINE	Plant				Tunon, H., Thorsell, W., and Bohlin, L. 1993. Mosquito Repelling Activity of Compounds Occurring in <i>Achillea millefolium</i> L. (Asteraceae). Economic Botany 48(2): 111-120, 1994.
2	HUMULENE	Leaf	0.5	22.0	-0.3745832187878271	--
32	HYDROQUINONE	Plant				Tunon, H., Thorsell, W., and Bohlin, L. 1993. Mosquito Repelling Activity of Compounds Occurring in <i>Achillea millefolium</i> L. (Asteraceae). Economic Botany 48(2): 111-120, 1994.
0	HYDROXYACHILLIN	Plant				Williamson, E. M. and Evans, F. J., Potter's New Cyclopaedia of Botanical Drugs and Preparations, Revised Ed., Saffron Walden, the C. W. Daniel Co., Ltd., Essex UK, 362 pp, 1988, reprint 1989.

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
8	INOSITOL	Plant				Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.
19	INULIN	Plant				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
6	IRON	Plant				--
0	ISOARTEMISIA-KETONE	Leaf	20.0	16000.0		Bisset, N.G., ed. 1994. Herbal Drugs and Phytopharmaceuticals. CRC Press. Boca Raton, FL. 566 pp.
0	ISOARTEMISIA-KETONE	Plant				--
7	ISOBORNEOL	Leaf	5.0	320.0	-0.49513094589241385	--
3	ISOBUTYL-ACETATE	Plant				--
11	ISORHAMNETIN	Plant				Tunon, H., Thorsell, W., and Bohlin, L. 1993. Mosquito Repelling Activity of Compounds Occurring in <i>Achillea millefolium</i> L. (Asteraceae). Economic Botany 48(2): 111-120, 1994.
0	ISOSCHAFTOSIDE	Plant				Bisset, N.G., ed. 1994. Herbal Drugs and Phytopharmaceuticals. CRC Press. Boca Raton, FL. 566 pp.
5	ISOVALERIC-ACID	Plant				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
0	KILOCALORIES	Plant		2900.0	-0.36931512722389037	Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.
0	LAVANDULOL	Leaf	1.0	15.0	1.7320504652833757	--
0	LEUCODIN	Plant				Williamson, E. M. and Evans, F. J., Potter's New Cyclopaedia of Botanical Drugs and Preparations, Revised Ed., Saffron Walden, the C. W. Daniel Co., Ltd., Essex UK, 362 pp, 1988, reprint 1989.

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
60	LIMONENE	Leaf	1.0	170.0	-0.268944101986277	--
53	LINALOOL	Leaf	1.0	4000.0	2.122508536493081	--
27	LINOLEIC-ACID	Leaf				Leung, A. Y. and Foster, S. 1995. Encyclopedia of Common Natural Ingredients 2nd Ed. John Wiley & Sons, New York. 649 pp.
0	LINOLEIC-ACID-ETHYL-ESTER	Plant				Tunon, H., Thorsell, W., and Bohlin, L. 1993. Mosquito Repelling Activity of Compounds Occurring in <i>Achillea millefolium</i> L. (Asteraceae). Economic Botany 48(2): 111-120, 1994.
0	LINOLEIC-ACID-METHYL-ESTER	Plant				Tunon, H., Thorsell, W., and Bohlin, L. 1993. Mosquito Repelling Activity of Compounds Occurring in <i>Achillea millefolium</i> L. (Asteraceae). Economic Botany 48(2): 111-120, 1994.
2	LINOLENIC-ACID-METHYL-ESTER	Plant				Tunon, H., Thorsell, W., and Bohlin, L. 1993. Mosquito Repelling Activity of Compounds Occurring in <i>Achillea millefolium</i> L. (Asteraceae). Economic Botany 48(2): 111-120, 1994.
78	LUTEOLIN	Plant				Tunon, H., Thorsell, W., and Bohlin, L. 1993. Mosquito Repelling Activity of Compounds Occurring in <i>Achillea millefolium</i> L. (Asteraceae). Economic Botany 48(2): 111-120, 1994.
7	LUTEOLIN-7-GLUCOSIDE	Plant				--
0	LUTEOLIN-7-O-BETA-D-GLUCOPYRANOSIDE	Plant				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
2	LUTEOLIN-7-O-GLUCOSIDE	Plant				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
4	LYSINE	Plant				Tunon, H., Thorsell, W., and Bohlin, L. 1993. Mosquito Repelling Activity of Compounds Occurring in <i>Achillea millefolium</i> L. (Asteraceae). <i>Economic Botany</i> 48(2): 111-120, 1994.
65	MAGNESIUM	Plant	340.0	1920.0	-0.6662824225194472	--
2	MALTOSE	Plant				Newall, C. A., Anderson, L. A. and Phillipson, J. D. 1996. <i>Herbal Medicine - A Guide for Health-care Professionals</i> . The Pharmaceutical Press, London. 296pp.
4	MANDELIC-ACID	Plant				Tunon, H., Thorsell, W., and Bohlin, L. 1993. Mosquito Repelling Activity of Compounds Occurring in <i>Achillea millefolium</i> L. (Asteraceae). <i>Economic Botany</i> 48(2): 111-120, 1994.
0	MANDELONITRILE-GLUCOSIDE	Plant				Tunon, H., Thorsell, W., and Bohlin, L. 1993. Mosquito Repelling Activity of Compounds Occurring in <i>Achillea millefolium</i> L. (Asteraceae). <i>Economic Botany</i> 48(2): 111-120, 1994.
14	MANGANESE	Plant	1.0	5.0	-0.6590690061822261	--
18	MANNITOL	Plant				Pedersen, M. 1987. <i>Nutritional Herbology</i> . Pederson Publishing. Bountiful, Utah. 377 pp.
0	MATRICIN	Plant		0.0		Bisset, N.G., ed. 1994. <i>Herbal Drugs and Phytopharmaceuticals</i> . CRC Press. Boca Raton, FL. 566 pp.
63	MENTHOL	Plant				--
0	MILLEFIN	Plant				Williamson, E. M. and Evans, F. J., <i>Potter's New Cyclopaedia of Botanical Drugs and Preparations</i> , Revised Ed., Saffron Walden, the C. W. Daniel Co., Ltd., Essex UK, 362 pp, 1988, reprint 1989.

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	MILLEFOLIDE	Plant				Williamson, E. M. and Evans, F. J., Potter's New Cyclopaedia of Botanical Drugs and Preparations, Revised Ed., Saffron Walden, the C. W. Daniel Co., Ltd., Essex UK, 362 pp, 1988, reprint 1989.
0	MOSCHATINE	Plant				Williamson, E. M. and Evans, F. J., Potter's New Cyclopaedia of Botanical Drugs and Preparations, Revised Ed., Saffron Walden, the C. W. Daniel Co., Ltd., Essex UK, 362 pp, 1988, reprint 1989.
22	MYRCENE	Leaf	0.5	20.0	-0.1654584943659963	--
6	MYRISTIC-ACID	Plant				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
5	NERYL-ACETATE	Plant		28.0	-0.5370290118452437	--
39	NIACIN	Plant				--
0	OCTEN-3-OL	Leaf				--
18	OLEIC-ACID	Plant				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
16	P-CYMENE	Leaf	9.0	1185.0	0.584380733883737	--
13	PALMITIC-ACID	Plant				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
1	PALMITIC-ACID-ETHYL-ESTER	Plant				Tunon, H., Thorsell, W., and Bohlin, L. 1993. Mosquito Repelling Activity of Compounds Occurring in <i>Achillea millefolium</i> L. (Asteraceae). <i>Economic Botany</i> 48(2): 111-120, 1994.

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	PALMITIC-ACID-METHYL-ESTER	Plant				Tunon, H., Thorsell, W., and Bohlin, L. 1993. Mosquito Repelling Activity of Compounds Occurring in <i>Achillea millefolium</i> L. (Asteraceae). <i>Economic Botany</i> 48(2): 111-120, 1994.
0	PENTACOSANE	Plant				--
26	PHENOL	Plant		155.0	-1.0	--
8	PHLOROGLUCINOL	Plant				Tunon, H., Thorsell, W., and Bohlin, L. 1993. Mosquito Repelling Activity of Compounds Occurring in <i>Achillea millefolium</i> L. (Asteraceae). <i>Economic Botany</i> 48(2): 111-120, 1994.
4	PHOSPHORUS	Plant	522.0	2950.0	-0.3068982377399405	--
3	PONTICAEPXIDE	Plant				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
14	POTASSIUM	Plant	3151.0	17800.0	-0.278763301762186	--
0	PROAZULENE	Plant				--
0	PROCHAMAZULENE	Plant				Bisset, N.G., ed. 1994. <i>Herbal Drugs and Phytopharmaceuticals</i> . CRC Press. Boca Raton, FL. 566 pp.
0	PROTEIN	Seed	286000.0	369000.0	1.2027089985205746	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
0	PROTEIN	Plant	19116.0	108000.0	-0.5364847835043116	--
43	PROTOCATECHUIC-ACID	Plant				Tunon, H., Thorsell, W., and Bohlin, L. 1993. Mosquito Repelling Activity of Compounds Occurring in <i>Achillea millefolium</i> L. (Asteraceae). <i>Economic Botany</i> 48(2): 111-120, 1994.
2	PRUNASIN	Plant				Bisset, N.G., ed. 1994. <i>Herbal Drugs and Phytopharmaceuticals</i> . CRC Press. Boca Raton, FL. 566 pp.

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
12	PYROCATECHOL	Plant				Tunon, H., Thorsell, W., and Bohlin, L. 1993. Mosquito Repelling Activity of Compounds Occurring in <i>Achillea millefolium</i> L. (Asteraceae). Economic Botany 48(2): 111-120, 1994.
176	QUERCETIN	Plant				Tunon, H., Thorsell, W., and Bohlin, L. 1993. Mosquito Repelling Activity of Compounds Occurring in <i>Achillea millefolium</i> L. (Asteraceae). Economic Botany 48(2): 111-120, 1994.
0	QUERCETIN-GLYCOSIDE	Plant				--
44	QUERCITRIN	Plant				--
0	RESIN	Plant		6000.0	-0.8622069963910537	List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
15	RIBOFLAVIN	Plant	1.0	5.6	-0.40499841324824026	--
87	RUTIN	Plant				Tunon, H., Thorsell, W., and Bohlin, L. 1993. Mosquito Repelling Activity of Compounds Occurring in <i>Achillea millefolium</i> L. (Asteraceae). Economic Botany 48(2): 111-120, 1994.
5	SABINENE	Leaf	1.0	1225.0	0.5192871434052357	--
34	SALICYLIC-ACID	Plant				Tunon, H., Thorsell, W., and Bohlin, L. 1993. Mosquito Repelling Activity of Compounds Occurring in <i>Achillea millefolium</i> L. (Asteraceae). Economic Botany 48(2): 111-120, 1994.
5	SAPONINS	Leaf				Leung, A. Y. and Foster, S. 1995. Encyclopedia of Common Natural Ingredients 2nd Ed. John Wiley & Sons, New York. 649 pp.
60	SELENIUM	Plant	0.3	1.6	-0.35611748372726487	--
4	SILICON	Plant	1.0	4.5	-0.5190064670266766	--
1	SODIUM	Plant	15.0	82.0	-0.2995388449907829	--
0	SPATHULENOL	Plant		495.0	2.658868354096619	--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
6	STACHYDRINE	Plant				--
8	STEARIC-ACID	Plant				Newall, C. A., Anderson, L. A. and Phillipson, J. D. 1996. <i>Herbal Medicine - A Guide for Health-care Professionals.</i> The Pharmaceutical Press, London. 296pp.
12	STIGMASTEROL	Plant				--
7	SUCCINIC-ACID	Leaf				Leung, A. Y. and Foster, S. 1995. <i>Encyclopedia of Common Natural Ingredients</i> 2nd Ed. John Wiley & Sons, New York. 649 pp.
7	SUCCINIC-ACID	Plant				--
14	SUCROSE	Plant				Newall, C. A., Anderson, L. A. and Phillipson, J. D. 1996. <i>Herbal Medicine - A Guide for Health-care Professionals.</i> The Pharmaceutical Press, London. 296pp.
3	SWERTISIN	Plant				Bisset, N.G., ed. 1994. <i>Herbal Drugs and Phytopharmaceuticals.</i> CRC Press. Boca Raton, FL. 566 pp.
0	T-CADINOL	Leaf	1.0	15.0	-0.5225815390117998	--
41	TANNIC-ACID	Plant				Tunon, H., Thorsell, W., and Bohlin, L. 1993. Mosquito Repelling Activity of Compounds Occurring in <i>Achillea millefolium</i> L. (Asteraceae). <i>Economic Botany</i> 48(2): 111-120, 1994.
35	TANNIN	Plant	28000.0	40000.0	-0.6370616203493836	--
23	TERPINEN-4-OL	Leaf	3.0	175.0	-0.24039913557404782	--
18	TERPINEOL	Plant				--
9	TERPINOLENE	Leaf	1.0	50.0	-0.1684008925639172	--
31	THIAMIN	Plant				Pedersen, M. 1987. <i>Nutritional Herbology.</i> Pederson Publishing. Bountiful, Utah. 377 pp.
0	THIAMINE	Plant				--
0	THIOPHENES	Leaf		167.0		--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	THIOPHENES	Flower		167.0		--
17	THUJONE	Plant				--
71	THYMOL	Leaf	1.0	15.0	-0.41187649807173515	--
4	TIN	Plant	5.0	26.0	0.34911685139896836	--
1	TRANS-CARVEOL	Plant		150.0	1.4141140551271352	--
2	TRANS-DEHYDROMATRICARIA-ESTER	Leaf				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
0	TRANS-TRANS-FARNESOL	Plant		160.0		--
0	TRICOSANE	Plant				--
0	TRICYCLENE	Leaf	0.6	27.0	-0.8389074385035388	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
15	TRIGONELLINE	Plant				Tunon, H., Thorsell, W., and Bohlin, L. 1993. Mosquito Repelling Activity of Compounds Occurring in <i>Achillea millefolium</i> L. (Asteraceae). Economic Botany 48(2): 111-120, 1994.
2	UNDECYLENIC-ACID-METHYL-ESTER	Plant				Tunon, H., Thorsell, W., and Bohlin, L. 1993. Mosquito Repelling Activity of Compounds Occurring in <i>Achillea millefolium</i> L. (Asteraceae). Economic Botany 48(2): 111-120, 1994.
24	VANILLIC-ACID	Plant				Tunon, H., Thorsell, W., and Bohlin, L. 1993. Mosquito Repelling Activity of Compounds Occurring in <i>Achillea millefolium</i> L. (Asteraceae). Economic Botany 48(2): 111-120, 1994.
0	VIBURNITOL	Plant				--
0	VICENIN-2-SCHAFTOSIDE	Plant				Bisset, N.G., ed. 1994. Herbal Drugs and Phytopharmaceuticals. CRC Press. Boca Raton, FL. 566 pp.

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	VICENIN-3-SCHAFTOSIDE	Plant				Bisset, N.G., ed. 1994. Herbal Drugs and Phytopharmaceuticals. CRC Press. Boca Raton, FL. 566 pp.
0	WATER	Plant		823000.0	0.22291061491730124	--
0	YOMOGI-ALCOHOL	Leaf	5.0	270.0		--
77	ZINC	Plant				--